



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

FEB 21 2013

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REPLY TO: 6WQ-SG

Mr. Christopher P. Witte
Senior Vice President
BASF Corporation
608 Copper Road
Freeport, TX 77541

RE: Petition for Reissuance Final Approval Decision

Dear Mr. Witte:

Effective the date of this letter, the Environmental Protection Agency (EPA) approves the reissuance request for an exemption to the land disposal restrictions for WDW-51, WDW-99, and WDW-408, located at the BASF Facility in Freeport, Texas.

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to EPA, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells codified in 40 CFR Part 148, provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed and by which exemptions pursuant to these petitions will be granted or denied.

A letter dated December 19, 2012, informed BASF that EPA was proposing to approve a petition reissuance request for an exemption to the land disposal restrictions. The public comment period associated with this decision began on December 27, 2012, and closed on February 15, 2013. No comments were received.

Based on a detailed technical review of the submitted petition reissuance request and support documents, EPA has determined that this information for the BASF Freeport facility meets the requirements of 40 CFR Part 148 by demonstrating no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this land disposal restrictions exemption:

Petition Reissuance Approval Conditions

This petition for reissuance of exemption to the land disposal restrictions to allow the continued injection of restricted hazardous wastes is subject to the following conditions, which are necessary to assure that the standard in 40 CFR §148.20(a) is met. The petition for reissuance of exemption approval conditions were revised to reflect the changes represented by this reissuance. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1). This reissued exemption is applicable to the existing three injection wells (WDW-51, WDW-99, and WDW-408) located at the BASF Facility in Freeport, TX.

1. Injection of restricted waste shall be limited to the following equivalent injection interval and injection zone. BASF will not complete any facility disposal well into the thin sand horizons present in the Lower Amphistegina "B" located between the log equivalent depth of 6700' to 6850' in WDW-99.

<u>Confining Zone</u>	<u>Injection Zone</u>	<u>Injection Interval</u>
2480' to 4910' KB	4910' to 7400' KB	5900' to 7400' KB

(Depths referenced to the WDW-99 September 4, 1981, Welex Induction/Velocity Log using Kelly Bushing (KB) depths in feet)

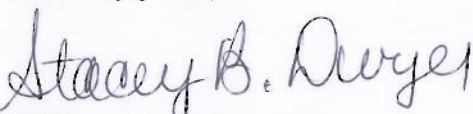
2. The cumulative injection flow rate for WDW-51, WDW-99 and WDW-408 shall not exceed 400 gpm into the Upper Amphistegina "B" (6,040' – 6,500') or 400 gpm into the Lower Amphistegina "B" (6,700' – 7,400').
3. The facility shall cease injection by December 31, 2028.
4. The characteristics of the injected waste stream shall at all times conform to those of Sections 6, 7, and 8 of the 2012 petition for reissuance document. The running three-month average specific gravity of the waste stream shall remain within a range from 1.03 to 1.25 measured at 60 °F with a reference temperature of 60 °F. This corresponds to a density range from 64.24 to 77.96 lb/ft³ inclusive, at 60 °F. The running three month average shall be calculated by multiplying each day's specific gravity value by that day's injected volume, totaling those values for the previous three-whole calendar month period, and dividing by that three calendar month injected volume. For the purpose of the above calculation, each day's specific gravity value shall be obtained by at least one representative grab sample of the composite waste stream
5. The approval for injection is limited to D002 and D018.
6. The facility must petition for approval to inject additional hazardous wastes which are not included in Condition No. 5, above. The facility must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuances and modifications should be made pursuant to §148.20 (e) or (f).

7. BASF shall annually submit to EPA the results of a bottomhole pressure survey for WDW-51, WDW-99, and WDW-408. These surveys shall be performed after shutting in each well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with §146.68(e)(1). The annual report should include a comparison of reservoir parameters determined from the falloff test with parameters used in the approved no migration petition. BASF shall also annually submit to EPA a radioactive tracer survey and annulus pressure test for WDW-51, WDW-99, and WDW-408.
8. BASF shall notify EPA in the event that WDW-51, WDW-99, or WDW-408 loses mechanical integrity, prior to any well workover or plugging of WDW-51, WDW-99, or WDW-408. BASF should also submit well workover or plugging procedures to EPA for review prior to commencing the work.
9. Upon the expiration, cancellation, reissuance, or modifications of the Texas Commission on Environmental Quality Underground Injection Control permit for WDW-51, WDW-99, and WDW-408, this exemption is subject to review. A new demonstration may be required if information shows that the basis for granting the exemption is no longer valid under 40 CFR §148.23 and §148.24.

In addition to the above conditions, this approval of a reissuance to an exemption to the land disposal restrictions is contingent on the validity of the information submitted in the BASF reissuance request. This final reissuance decision is subject to termination when any of the conditions occur which are listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Phil Dellinger at (214) 665-8324.

Sincerely yours,


for William K. Honker, P.E.
Director
Water Quality Protection Division

ecc: Mark Conger, BASF
Rod Kutz, BASF
Bonnie Coughlin, BASF
Lorrie Council, TCEQ
Rich Heitzenrater, TCEQ